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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,137	05/06/2004	Neil R. Wilson	H 50052 HST	7260

423 7590 01/12/2006

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EXAMINER	
CARRILLO, BIBI SHARIDAN	
ART UNIT	**PAPER NUMBER**
1746	

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/840,137	WILSON ET AL.	
	Examiner	Art Unit	
	Sharidan Carrillo	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is indefinite because it is unclear what is meant by acid equivalent weight.

Claim 13 is indefinite because it is not clear what is meant by "number average molecular weight".

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-5, 7, 10, 13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergishagen et al. (5443748).

Bergishagen et al. teaches a method of cleaning paint covered surfaces of paint line tubes, paint line fixtures, and paint booths during a cleaning cycle using a composition comprising a polymeric material and an organic solvents (Abstract, col. 3, lines 35-43. Bergishagen et al. teach polymers including polyacrylamide, ethylene oxide polymers, and polyacrylic acid. The claim limitation of less than 5 weight percent water reads on no water present. Alternatively, col. 6, lines 25-29 teaches 0.1 to 20% of the polymer and from 80-99.9% by weight of the organic solvent. Bergishagen teaches

in col. 4, lines 24-25, preferred aqueous based materials including water. Therefore the composition, based on the claimed ranges could include 80% organic solvent, 16% by weight of the polymer, and 4% by weight of the aqueous based solvent (i.e. water). In col. 4, lines 1-17, Bergishagen et al teaches the solvent carrier can be an organic solvent. In reference to claims 3 and 13, the limitations are inherent properties of the composition. In reference to claim 4, refer to col. 4, lines 1-17. In reference to claim 5, refer to col. 3, lines 58-60. In reference to claim 7, refer to col. 4, lines 53-57. In reference to claim 10, Bergishagen et al teaches a polyacrylic acid. In reference to claim 15, the limitations are met since Bergishagen teaches the same polymer and is performing the same method steps as the claimed invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 6 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergishagen et al. (5443748).

Bergishagen et al. fail to teach the specific concentration of each of the organic solvent. In the absence of a showing of criticality, adjusting the concentration would have been within the level of the skilled artisan (Akzo v. E. I. DuPont de Nemours 1 USPQ 2d 1704 Fed.Cir. 1987). Bergishagen et al. is silent with respect to the type of paint removed. However, it would have been within the level of the skilled artisan to remove epoxy, polyurethane, or polyacrylamide resins since these paints are conventionally used in paint spray booths (4948513).

8. Claims 2, 11-12, 14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergishagen et al. (5443748) in view of Waldmann et al. (5294352).

Bergishagen et al. teach the invention substantially as claimed with the exception of the polymer having functional groups made of ammonium salts, phosphoric acids, amines, and a combination of an acid and an amine group.

Waldmann teaches a composition for detackification and removal of paint from paint spray booths. In col. 6 and 7 bridging and col. 9, Waldmann teaches polymer adduct compositions comprising functional groups of phosphoric acid (component A) and polyalkylamine (component b) and a tertiary ammonium salt group (component D).

It would have been obvious to a person of ordinary skill in the art to have modified the method of Bergishagen et al. to include polymers having various functional groups, as taught by Waldmann, for purposes of performing the same function of paint removal.

Response to Arguments

9. Applicant argues that Bergishagen fails to teach the polymer dissolved in the solvent. Applicant's arguments are unpersuasive for the following reasons. The examiner agrees that Bergishagen teaches introducing a gel into the paint system. However, Bergishagen teaches another embodiment. In particular, Bergishagen teaches cleaning the surface by a rinsing agent (col. 2, lines 55-63). In col. 2, lines 30-33, Bergishagen teaches that the rheological agent or additive (i.e. polymer) becomes soluble during the rinse cycle. In col. 4, lines 63-65, Bergishagen teaches that the solvent rinse will dissolve any rheological material to insure a cleaned system. Therefore, Bergishagen teaches further cleaning by rinsing the paint delivery system with a rheological material dissolved in an organic solvent.

10. Applicant argues that the limitations of claims 3 and 13 are inherent properties of the polymer and not the composition and therefore, are not taught by the prior art. Applicant's arguments are unpersuasive because Bergishagen teaches the same

polymers as the claimed invention and therefore the limitations of claims 3 and 13 are inherent properties of the polymer of Bergishagen.

11. In reference to claims 6 and 9, applicant argues that there is not teaching or suggestion of combining 4 different organic solvents in particular quantities to achieve the claimed invention. Applicant's arguments are unpersuasive because col. 4, lines 5-18 teaches organic solvent mixtures comprising ketones, aromatic and aliphatic hydrocarbons, alcohols and esters. In reference to the concentration, concentration limitations are obvious absent a showing of criticality (Akzo v. E. I. du Pont de Nemours 1 USPQ 2d 1704 (Fed. Cir. 1987). Applicant further argues that the polymer can be has high as 20% and that the remaining 80-99.9% is organic solvent. Bergishagen teaches polymers in the range of 0.1 to 20% by weight, the range being within the claimed range of applicant's instant invention. The organic solvent has a range of 80-99.9% by weight. The organic solvent mixture of claim 6 falls with the claimed range taught by Bergishagen.

12. In reference to claims 2, 11-12 and 14, applicant argues that there is no motivation to use the polymers of Waldmann '352 in the non-aqueous composition of Bergishagen '748. Applicant argues that one would be more likely to use the polymers of the '352 patent in the organic solvent aqueous based compositions of Bergishagen '748. Applicant further argues that this alternative combination would not achieve applicant's invention, where the amount of water is less than 5% by weight. Applicant's arguments directed to the improper combination of Bergishagen in view of Waldmann are unpersuasive for the following reasons. In col. 4, lines 1-20, Bergishagen teaches

the solvent may be a combination of organic solvents in an aqueous based solution. Col. 6, lines 25-29 teaches 0.1 to 20% of the polymer and from 80-99.9% by weight of the organic solvent. Bergishagen teaches in col. 4, lines 24-25, preferred aqueous based materials including water. Therefore the composition, based on the claimed ranges could include 80% organic solvent, 16% by weight of the polymer, and 4% by weight of the aqueous based solvent (i.e. water). The examiner further maintains the position that it would be obvious to use the polymer of Waldmann with the organic solvent, aqueous based solution of Bergishagen. For clarification purposes, the examiner is not modifying the non-aqueous composition of Bergishagen to include the polymers of Waldman. The aqueous based organic solvent mixture of Bergishagen is being modified to include the polymers of Waldmann.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 571-272-1297. The examiner can normally be reached on Monday-Wednesday, 6:00a.m-3:30pm, with alternating Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sharidan Carrillo
Primary Examiner
Art Unit 1746

bsc

SHARIDAN CARRILLO
PRIMARY EXAMINER